

WHAT IS CLAIMED IS:

- 1 1. A method comprising,
2 in a network, encapsulating data requests generated by an
3 application in a first system;
4 transferring the encapsulated data requests to a second
5 system;
6 executing the encapsulated data requests in the second
7 system; and
8 processing in the first system responses generated by the
9 encapsulated data requests in the second system.
- 1 2. The method of claim 1 in which encapsulating comprises:
2 generating an Extensible Markup Language (XML) structure
3 for each data request; and
4 converting the XML structure to an XML request.
- 1 3. The method of claim 2 in which the XML structure
2 comprises a variable stream of data stored in memory of the
3 first system, the stream including an XML element for each
4 request.
- 1 4. The method of claim 3 in which the XML element is a class
2 object whose data is stored to generate XML.
- 1 5. The method of claim 4 in which the XML element includes
2 data from a data set object.

1 6. The method of claim 5 in which the data set object
2 includes table dictionaries, column names and data from record
3 sets, and stored procedure parameters.

1 7. The method of claim 1 in which transferring includes a
2 text transmission protocol.

1 8. The method of claim 7 in which the text transmission
2 protocol is Hypertext Transfer Protocol.

1 9. The method of claim 1 in which executing comprises:
2 de-encapsulating the encapsulated data requests by
3 parsing into request statements; and
4 executing the request statements.

1 10. The method of claim 9 further comprising:
2 translating responses from the executed request
3 statements into an XML format; and
4 sending the XML formatted responses to the first system.

1 11. A distributed application method comprising:
2 converting application requests in a first system;
3 transmitting the converted application requests to a
4 second system over a network;
5 parsing the converted application requests in the second
6 system into request statements; and

7 executing the request statements in the second system.

1 12. The method of claim 11 in which converting comprises:

2 generating a data structure for storing data and
3 parameters related to an application that produced the
4 application requests;

5 translating the application requests into a standardized
6 delimited data structure stored in a memory of the first
7 system; and

8 transforming the standardized delimited data structure in
9 conjunction with the data structure into a stream of text
10 based data utilizing a Extensible Markup Language (XML)
11 format.

1 13. The method of claim 11 in which the parsing comprises:

2 breaking down the converted application requests to an
3 executable command format utilizing data and parameters
4 related to an application.

1 14. The method of claim 13 in which executing further

2 comprises evaluating executable commands prior to execution in
3 the second system.

1 15. The method of claim 14 in which executing further

2 comprises evaluating results generated by the executable
3 commands.

1 16. The method of claim 15 further comprising:

2 converting the results into a stream of text based data
3 in a standardized XML format; and

4 transmitting the converted results over the network to
5 the first system.

1 17. An application server method comprising:

2 generating a first data structure for storing data and
3 parameters related to an application residing in the server;

4 translating application requests from the application
5 into a delimited second data structure stored in a memory;

6 generating a stream of text-based data in an Extensible
7 Markup Language (XML) format from the second data structure.

1 18. The method of claim 17 in which the first data structure
2 includes database tables, procedure results from logic calls
3 and status/error messages.

1 19. The method of claim 17 in which the second data structure
2 includes an element for each of the application requests.

1 20. The method of claim 19 in which the element is a class
2 object.

1 21. A method comprising:

2 in a server, receiving a stream of text-based data in an

3 Extensible Markup Language (XML) format;

4 parsing the stream into request statements; and

5 executing each of the request statements.

1 22. The method of claim 21 in which executing further

2 comprises intercepting the request statements prior to

3 execution and applying additional logic based on a type or

4 content of the request statements.

1 23. The method of claim 21 in which executing further

2 comprises applying additional logic to responses generated

3 from executing the request statements.

1 24. The method of claim 21 further comprising:

2 converting responses generated from each of the executed

3 request statements into an XML format.

1 25. A computer program product residing on a computer

2 readable medium having instructions stored thereon which, when

3 executed by the processor, cause the processor to:

4 convert application requests in a first system;

5 transmit the converted application requests to a second

6 system over a network;

7 parse the converted application requests in the second
8 system into request statements; and
9 execute the request statements in the second system.

1 26. A computer program product residing on a computer
2 readable medium having instructions stored thereon which, when
3 executed by the processor, cause the processor to:

4 generate a first data structure for storing data and
5 parameters related to an application residing in the server;

6 translate application requests from the application into
7 a delimited second data structure stored in a memory;

8 generate a stream of text-based data in an Extensible
9 Markup Language (XML) format from the second data structure.

1 27. A computer program product residing on a computer
2 readable medium having instructions stored thereon which, when
3 executed by the processor, cause the processor to:

4 receive a stream of text-based data in an Extensible
5 Markup Language (XML) format;

6 parse the stream into request statements; and

7 execute each of the request statements.

1 28. An enhanced graphical user interface (GUI) method
2 comprising:

3 displaying a plurality of visual controls on an
4 input/output device; and

5 displaying at least one data enabled control on the
6 input/output device.

1 29. The method of claim 28 in which the data enabled
2 control comprises a control having properties describing data
3 relationships to the control.

1 30. The interface of claim 29 in which the data enabled
2 control further comprises properties describing locations of
3 data and data sources pertaining to the control.

1 31. The method of claim 28 in which the data enabled
2 control is user-configurable.

1 32. The method of claim 30 in which the properties
2 comprise:

- 3 a location of a database table;
- 4 a name of the database table; and
- 5 a column name representing the control.

1 33. The method of claim 32 in which the properties
2 further comprise:

- 3 a listing of table relationships;
- 4 an indicator to indicate whether the control is a
- 5 key column in the table; and
- 6 an indicator to indicate whether the control is a
- 7 primary key column.

1 34. The method of claim 33 in which the properties
2 further comprise:
3 an indicator to indicate whether the control is part
4 of a compound primary key;
5 an indicator to indicate whether a record is locked
6 when in use; and
7 an indicator to indicate whether the control if data
8 in the control has changed.